

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-11 (canceled).
12. (new) Polyvinyl alcohol gel comprises at least two polyvinyl alcohols of the types PVA1, PVA2 and PVA3 and a swelling agent, wherein the degrees of polymerisation DP of PVA1 and PVA3 are > 1000 and the degree of polymerisation DP of PVA2 is in the range of 50-100 and PVA1 and PVA2 are predominantly linear whereas PVA3 has a fraction of long-chain branchings.
13. (new) The polyvinyl alcohol gel according to claim 12, wherein the gel has a modulus of elasticity E and/or a strength sm in MPa is >5 and optionally a stress-strain curve having a negative curvature over an interval within the range of 0-300% strain.
14. (new) The polyvinyl alcohol gel according to claim 13, wherein the modulus of elasticity E and/or strength sm is >10 .
15. (new) The polyvinyl alcohol gel according to claim 14, wherein the modulus of elasticity E and/or strength sm is >15 .

16. (new) The polyvinyl alcohol gel according to claim 13, wherein the modulus of elasticity E and/or strength σ is >20 .
17. (new) The polyvinyl alcohol gel according to claim 12, wherein the gel is obtained from a mixture of polyvinyl alcohol and swelling agent, wherein the viscosity of the mixture during forming is $>10,000$ mPa.
18. (new) A process for preparing the gel of claim 17, including extruding the mixture to obtain a gel formation.
19. (new) The process according to claim 18, including storing the gel formation at a temperature above the freezing point, wherein a heat treatment is optionally carried out and/or a reduction in the water content takes place during the storage.
20. (new) The polyvinyl alcohol gel according to claim 12, wherein
 - a) the degree of hydrolysis of PVA1, PVA2 and PVA3 in mole % is >95 ;
 - b) the 1,2-glycol content of PVA1, PVA2 and PVA3 in mole % is <3 ;
 - c) the number of short-chain branchings of PVA1, PVA2 and PVA3 per monomer unit is $<10^{-2}$; and
 - d) PVA1, PVA2 and PVA3 preferably have an atactic conformation.
21. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) the degree of hydrolysis of PVA1, PVA2 and PVA3 in mole % is >98 ;
- b) the 1,2-glycol content of PVA1, PVA2 and PVA3 in mole % is <1 ;
- c) the number of short-chain branchings of PVA1, PVA2 and PVA3 per monomer unit is $<10^{-3}$; and
- d) PVA1, PVA2 and PVA3 preferably have an atactic conformation.

22. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) the degree of hydrolysis of PVA1, PVA2 and PVA3 in mole % is >99 ;
- b) the 1,2-glycol content of PVA1, PVA2 and PVA3 in mole % is <0.5 ;
- c) the number of short-chain branchings of PVA1, PVA2 and PVA3 per monomer unit is $<10^{-4}$; and
- d) PVA1, PVA2 and PVA3 preferably have a predominantly syndiotactic conformation.

23. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) the degree of hydrolysis of PVA1, PVA2 and PVA3 in mole % is >99.8 ;
- b) the 1,2-glycol content of PVA1, PVA2 and PVA3 in mole % is <0.2 ;
- c) the number of short-chain branchings of PVA1, PVA2 and PVA3 per monomer unit is $<10^{-6}$; and

- d) PVA1, PVA2 and PVA3 preferably have a predominantly syndiotactic conformation.

24. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) PVA1 and PVA3 have a degree of polymerisation DP > 1000; and
- b) PVA2 has a degree of polymerisation DP in the range of 50-1000.

25. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) PVA1 and PVA3 have a degree of polymerisation DP > 2000; and
- b) PVA2 has a degree of polymerisation DP in the range of 60-500.

26. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) PVA1 and PVA3 have a degree of polymerisation DP > 3000; and
- b) PVA2 has a degree of polymerisation DP in the range of 70-300.

27. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) PVA1 and PVA3 have a degree of polymerisation DP > 5000; and

- b) PVA2 has a degree of polymerisation DP in the range of 75-200.

28. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) the fraction of PVA2 relative to PVA in wt.% is in the range of 1-95;
- b) the fraction of PVA3 relative to PVA in wt.% is in the range of 1-80; and
- c) the fraction of PVA relative to PVA and swelling agent in wt.% is in the range of 5-90.

29. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) the fraction of PVA2 relative to PVA in wt.% is in the range of 2-90;
- b) the fraction of PVA3 relative to PVA in wt.% is in the range of 2-60; and
- c) the fraction of PVA relative to PVA and swelling agent in wt.% is in the range of 7-95.

30. (new) The polyvinyl alcohol gel according to claim 12, wherein

- a) the fraction of PVA2 relative to PVA in wt.% is in the range of 3-85;
- b) the fraction of PVA3 relative to PVA in wt.% is in the range of 3-50; and
- c) the fraction of PVA relative to PVA and swelling agent in wt.% is in the range of 10-80.

31. (new) The polyvinyl alcohol gel according to claim 12, wherein the gel has

- a) a modulus of elasticity E in MPa is >0.1 ; and optionally the stress-strain curve has a negative curvature over an interval within the range of 0-300%; and/or
- b) a strength s_m in MPa is >1 , and optionally a breaking elongation e_b in % is >300 .

32. (new) The polyvinyl alcohol gel according to claim 12, wherein the gel has

- a) a modulus of elasticity E in MPa is >1 ; and optionally the stress-strain curve has a negative curvature over an interval within the range of 0-300%; and/or
- b) a strength s_m in MPa is >3 , and optionally a breaking elongation e_b in % is >400 .

33. (new) The polyvinyl alcohol gel according to claim 12, wherein the gel has

- a) a modulus of elasticity E in MPa is >5 ; and optionally the stress-strain curve has a negative curvature over an interval within the range of 0-300%; and/or
- b) a strength s_m in MPa is >5 , and optionally a breaking elongation e_b in % is >500 .

34. (new) The polyvinyl alcohol gel according to claim 12, wherein the gel has

- a) a modulus of elasticity E in MPa is >10 ; and

optionally the stress-strain curve has a negative curvature over an interval within the range of 0-300%; and/or

- b) a strength σ_m in MPa is >10 , and optionally a breaking elongation ϵ_b in % is >550 .

35. (new) The polyvinyl alcohol gel according to claim 12, wherein the gel has

- a) a modulus of elasticity E in MPa is >15 ; and optionally the stress-strain curve has a negative curvature over an interval within the range of 0-300%; and/or

- b) a strength σ_m in MPa is >15 , and optionally a breaking elongation ϵ_b in % is >550 .

36. (new) The polyvinyl alcohol gel, according to claim 12, wherein the gel has a degree of swelling Q in water in the range of 1.01-3.

37. (new) The polyvinyl alcohol gel, according to claim 12, wherein the gel has a degree of swelling Q in water in the range of 1.03-2.

38. (new) The polyvinyl alcohol gel, according to claim 12, wherein the gel has a degree of swelling Q in water in the range of 1.05-1.5.

39. (new) The polyvinyl alcohol gel according to claim 12, wherein the gel is transparent and free of organic solvents.

40. (new) A process according to claim 18, including preparing the gel into a biomedicine.
41. (new) A process according to claim 18, including preparing the gel into an agriculture product.